

# Integrated Digital Environment (IDE)

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May 15, 2001

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# Today's Agenda

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- IDE Policy and Guidance
- What is the problem
- What is the solution
- IDE tools
- Process, Trading Partner Agreements and Contracts Language
- Industry IDE Status
- Bottom Line

# Policy and Guidance

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## ➤ DepSecDef Memorandum - July 2, 1997

- Eliminate stovepipe information systems
- Set corporate goal of digital operations being the method of choice;
- Overwhelming majority of acquisition and logistics operations to be based on digital methodologies and products by end of 2002;
- Made PMs responsible for data management systems and appropriate digital environment.

## ➤ USD (A&T) Memorandum - July 15, 1997

- Integrated Program Management Initiative (IPMI) Executive Steering Group (ESG).
  - ✓ Develop additional guidance.
  - ✓ Coordinate cross Component activities.
- Focuses IDE initial implementation toward ACAT I programs.

## ➤ USD (AT&L) Feedback to ESG - October 1999

- Policy is to design Program Office IDEs with a Program Manager Focus
- Industry partners are encouraged to implement IDE solutions that best meet their preferred business models
- No specific IDE solution is directed

## ➤ USD (AT&L) memo to SAEs for IDE Pilot Nominations- March 2001

- Announces intent to launch IDE pilots as proofs of concepts
- Requests SAEs support in identifying and recommending pilots

# 5000.2R IDE Language

## (2.6.3 Program management/IDE)

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- DoD policy requires the *maximum use of digital operations throughout acquisition and the entire system life cycle.*
  - In particular, using *interoperability standards for data exchange* is critical to other programs.
  - *Solicitations shall require specific proposals* for an IDE solution to support acquisition and operational support activities. . new contracts shall require the *contractor to provide on-line access to programmatic and technical data. Contracts shall specify the required functionality and data standards. The data formats of independent standards-setting organizations shall take precedence over all other formats.* The issue of data formats and transaction sets shall be independent of the method of access or delivery.
  - Industry partners have been strongly encouraged to develop and implement IDE solutions that best meet their preferred business models. Consequently, *program office IDE shall take maximum advantage of and have minimum impact on industry solutions.*
- At milestone and other appropriate decision points and program reviews, the PM shall *address the status and effectiveness of the IDE.*

# Integrated Digital Environment “Problem”

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## ➤ Weapon Systems (acquisition and logistic)

- All need similar information, services
  - ✓ Cost, schedule, performance, data control, product data etc.

**BUT**

- Usually we tell contractors not only what we want but how we want it

## ➤ Resulting Problem

- Information stovepipes built
  - ✓ Unique to the program
    - Direct charge
  - ✓ Expensive
    - Contractors can't share information systems across programs
    - Usually have multiple instances (copies) of data
  - ✓ Limited sharing of information across programs

# Today's Environment

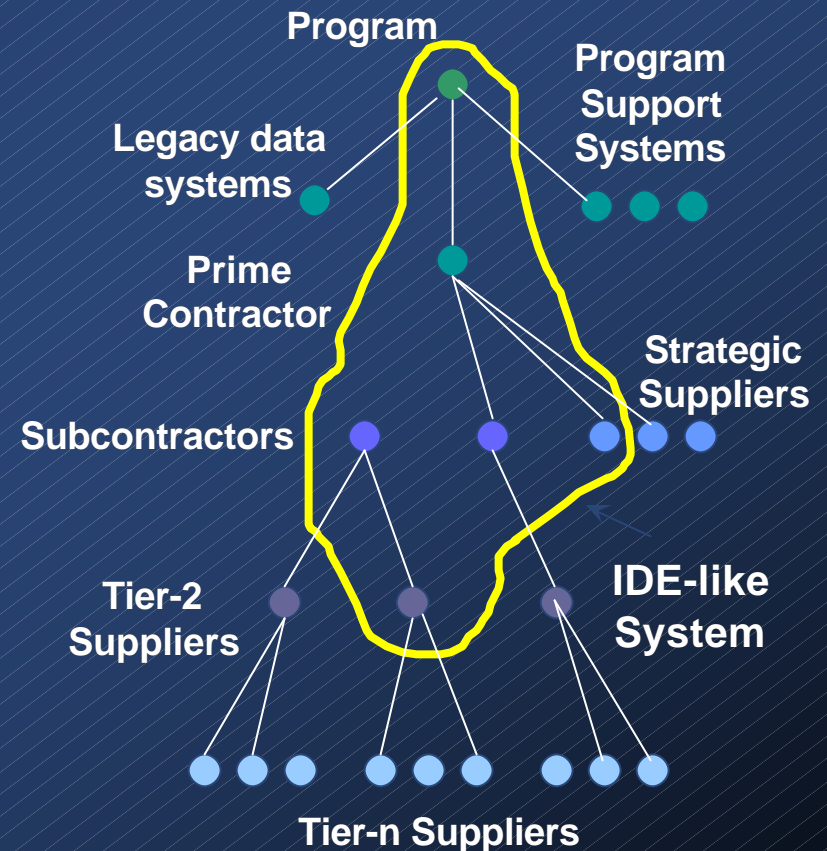
## Current Approach

- Solution typically a Web-based Information Environment...often delivered as an Extranet
- Funded by a specific Program or functional Supply Chain Management initiative
- Varying sets of tools and capabilities
- Largely reliant upon human intervention to provide process and data interoperability
- Cumbersome paper-based legacy logistics data

## Resultant Situation

- Many Point-to-Point “IDE-like Systems” built for individual Programs or Initiatives - Chaos
- Excessive cost resulting from duplication of effort to build and maintain - Impacts limited budget
- Incompatibility between “IDE-like Systems” and incumbent program support systems - Inhibits common solutions
- Inefficient logistics and lifecycle management

## Typical Program-Unique Approach (Multiplied by “n” programs)





# Integrated Digital Environment “Solution”

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## ➤ Follow industry

- Receive our information as a “service” we purchase from the contractor
  - ✓ Contractor is custodian of data
    - Provides service
  - ✓ DoD is owner of data
    - Utilize the data through the service provided by the contractor

## ➤ Specify “what” not “how”

- Focus on identifying information needs (data type, format, access)
- Contractor provides most efficient, replicable mode (may already be deployed)
- Contractor cost maybe “indirect”, allocated across many programs

## ➤ Leverage benefits across programs

- Shared access to data across programs
- Shared access for acquisition and logistics
- Reduce cost through “single instance” of data

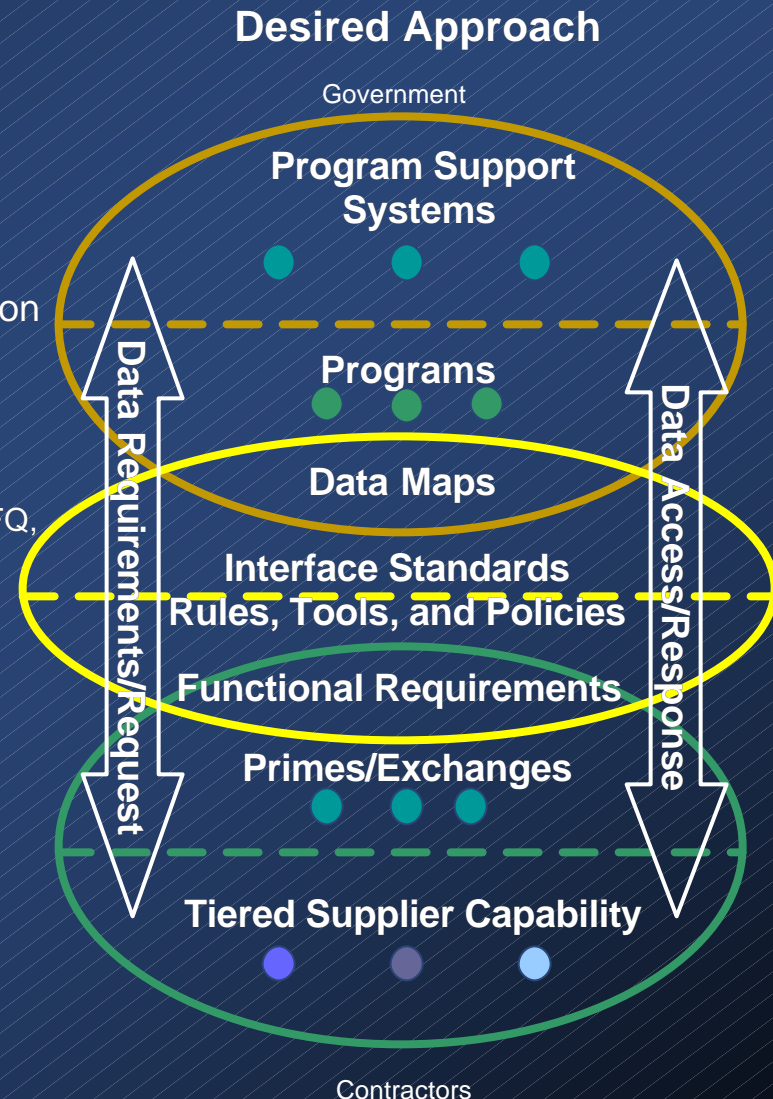
# Future Environment

## Key Deliverables

- Tools to assist PM (Gov and Contractor)
- Develop **Trading Partner Agreement (TPA)** standard in partnership with Industry for Department-wide use
- Prepare **common contract language** for use in acquisition and logistics programs (e.g. Sections C, L & M)
- Agree on **universal standards** to provide consistency
- Champion **Pilot programs** to validate approach
  - Pilots that include interoperability among processes (e.g. RFQ, RFP, EVMS)
- Develop **Metrics** to measure progress

## Benefits

- Improved readiness
- Realize Industry experience of 20%-30% increased productivity
- Single instance of data regardless of location
- Reduce Life Cycle costs
- Optimise DoD Acquisition/Logistics infrastructure -- opportunity to reinvest/recapitalize
- Additional product (planes, ships, tanks) for equivalent period cost





# IDE - Tools a PM could use

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- IDE Initiative Organization
  - OUSD (AT&L)
  - IDE Lead
  - IDE Working Group
    - ✓ Army, Air Force, Navy, DCMA, DSMC, OSD
- DoD IDE web site (<http://ide.dsmc.dsm.mil>) updated
  - Single source for IDE Policy and Guidance
  - Operational Architecture and Metric Analysis Tool (OAMAT) has collected over 90 Army and Navy ACAT I and II Program Office IDE related data.
    - ✓ Metrics data
  - Program Manager's handbook
    - ✓ Sections
      - Roles and responsibilities
      - Function and processes
      - IDE architecture
      - Contractor performance specification
      - Managing program data
      - Change management
      - Implementing and integrating an IDE
      - Building the bridge between Acquisition and logistics
      - Applications, methodologies and standards

# Process, Trading Partner Agreement and Contract Language

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## ➤ Three key elements

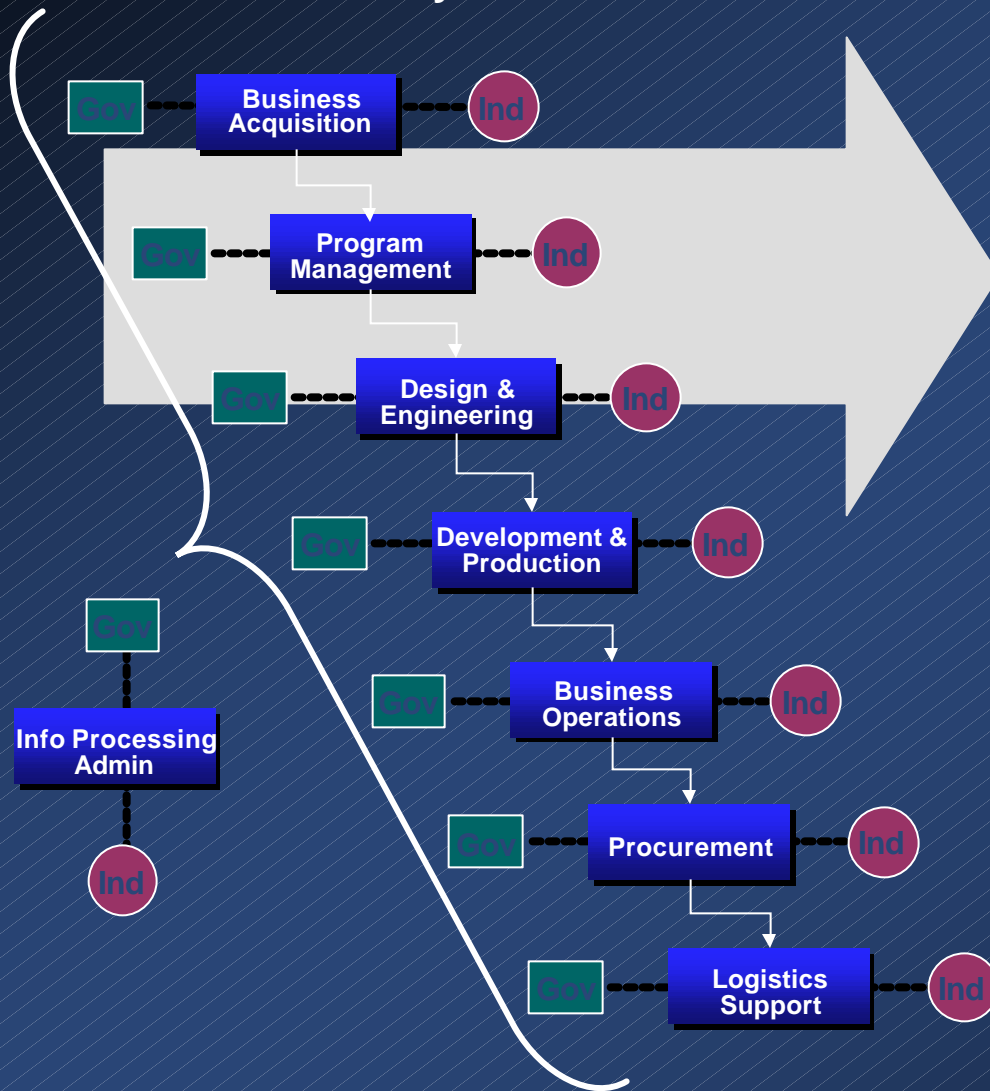
- **Process work**
  - ✓ Processes establish mutual terms and approaches
- **Trading partner agreement**
  - ✓ TPA defines what functionality and data transfer formats
- **Contract Language**
  - ✓ Contract language establishes high level requirements, funding approach

## ➤ Purpose

- To facilitate expansion of IDEs in acquisition programs
- Provides a uniform, universal set of business rules that will allow for standardization of e-business processes between DoD and industry
- Allow industry to propose the most efficient and cost effective IDE solution that meets the government's needs
- Provides a complementary approach:

# Government/Industry Activity Integration

## Business Life Cycle

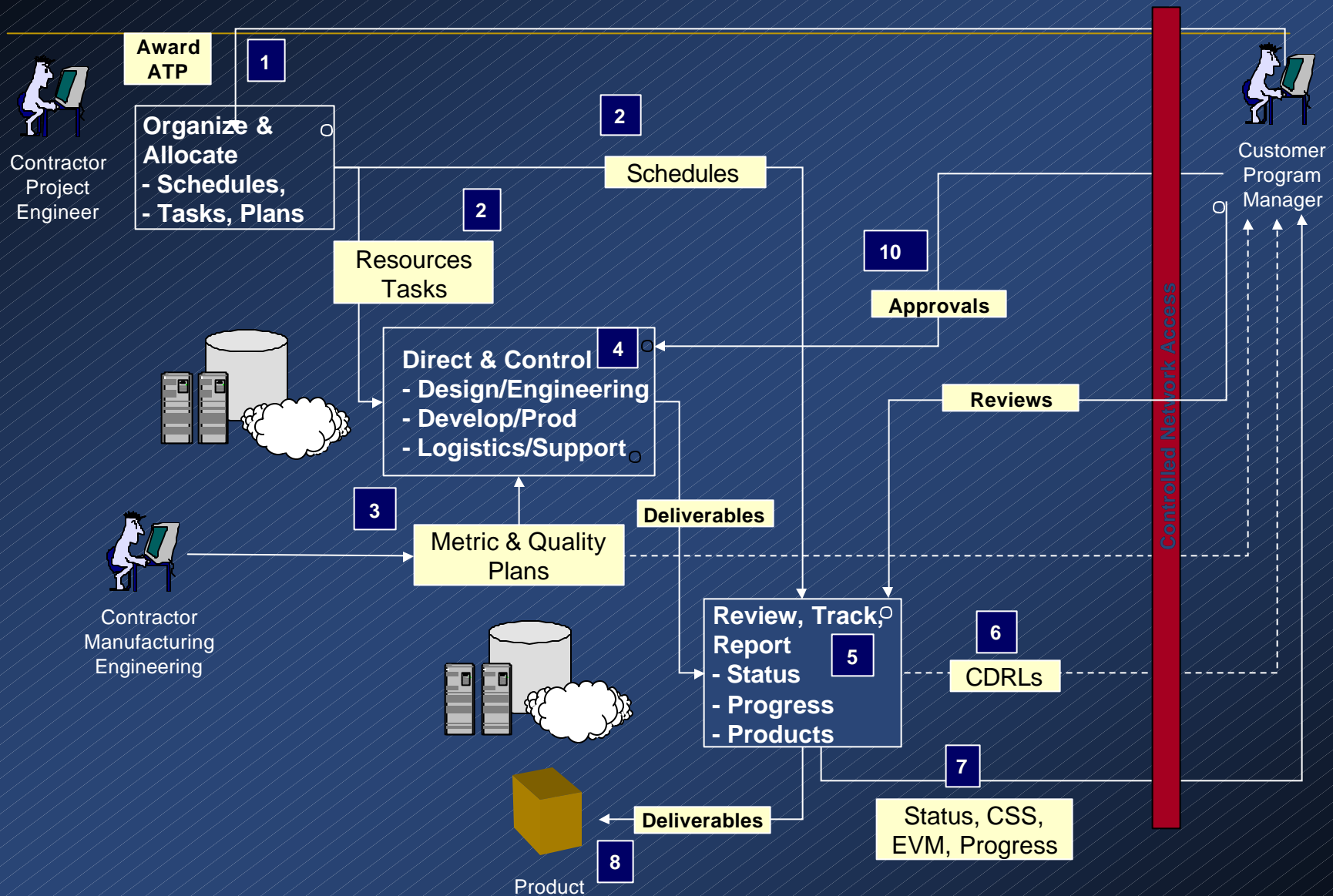


## Government/Industry Activity Integration

- Interaction between Government and Industry analogous to bridging islands of automation
- Describe key interaction points between Government and Industry using scenarios
  - Business Activities
  - Players
  - Business Objects
  - Interfaces
  - Data standards
- **Use scenarios to expose IDE modes of operation**

**Process Interaction Spans All Business Life Cycle Stages**

# (2A) Scenario: Program Management Life Cycle



# TPA outline

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## ➤ PURPOSE

- The Company and its Trading Partners will facilitate business processes by electronically transmitting/accessing data to the maximum extent practical.

## ➤ DEFINITIONS

## ➤ SYSTEM OPERATIONS

## ➤ DATA TRANSACTIONS

## ➤ MEANS OF TRANSMISSION

## ➤ SIGNATURES

## ➤ GARBLED TRANSMISSIONS

## ➤ TRANSACTION SECURITY

## ➤ RETENTION

## ➤ RECEIPT AND ACCEPTANCE

## ➤ TERMS AND CONDITIONS PRECEDENCE

## ➤ ENFORCEABILITY AND ADMISSIBILITY

# Industry IDE Status

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- Industry Associations pursuing common processes
  - Intent is to reduce the number of “IDE-like” systems and processes
- Trading partner Agreement
  - Format drafted
  - Need to “flesh out” the content
  - Demonstrate in a pilot
- Contract Language stalled
  - All Industry players not yet convinced there is a common contract language approach
  - Industry association approach for gaining contract language consensus will take time
- Several companies are pursuing the use of templates to assist in enabling IDE functionality between industry and government partners



# IDE- Pilots

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## ➤ OSD AT&L direction

- Series of proof of concept IDE pilots across the services
- Notification went out through each service
  - ✓ USN through the Navy IDE working Group
- Due date was 1 May 01
- Received 20 proposals
  - ✓ alpha contracting
  - ✓ Earned Value management
  - ✓ Drawing Collaboration
  - ✓ Wide variety
- Selection scheduled for next week
  - ✓ Criteria
    - IDE applicability
    - Pilot Scope
    - Pilot Schedule
    - Extensibility across programs/Services
    - Program commitment to conducting baseline measurements, performance improvement measurement, and knowledge transfer

# Bottom Line

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## ➤ Summary

- IDE = Elimination of information stovepipes
  - ✓ Eliminate unique solutions in favor of “cross-jurisdictional” approaches
- Emphasize IDE within DoD
  - ✓ DoD is serious about IDE
  - ✓ DoDD 5000.2R mandates IDE
- Industry supports/desires to accelerate adoption of IDE
  - ✓ Industry recognizes the value of IDE and is engaged
  - ✓ Rather build more product than IT systems

## ➤ What can you do to help?

- Push IDE in within your respective organizations and customer base
- Stress common solutions that transcend organizational boundaries
- Support the generation of templates and standards
  - ✓ <http://ide.dsmc.dsm.mil>